

**Environmental Impact Statement on Rules to Eradicate
Chronic Wasting Disease in Wisconsin's Free-Ranging
White-tailed Deer Herd**

Wisconsin Department of Natural Resources

**Gerald Bartelt
James Pardee
Kurt Thiede**

February 2003

Introduction

Chronic Wasting Disease (CWD) was discovered in southwestern Wisconsin on February 28, 2002 as part of routine testing for the disease, conducted since 1999. The Department of Natural Resources (DNR), Department of Agriculture Trade and Consumer Protection (DATCP), and the Department of Health and Family Services (DHFS) responded by forming an Interagency Team of scientists and specialists to help guide the response to this serious disease. Additional testing was done around the location where the disease was detected to determine the extent and prevalence of the disease. The Interagency Team used these additional data along with published scientific literature and consultation with CWD experts around the continent to formulate its response -- which was designed to prevent the spread of CWD outside the affected area and eliminate CWD from Wisconsin. The legislature met in an emergency session in May 2002 to provide additional authorities and tools along with needed funds to combat CWD. The Natural Resources Board adopted emergency rules in June 2002 that authorized the Department to take action to prevent the spread of CWD and eliminate it from Wisconsin. These emergency rules may be extended until September 1, 2003.

This Environmental Impact Statement (EIS) assesses proposed rules that would give the DNR authority and tools necessary to prevent the spread of CWD and eliminate the disease from Wisconsin. The underlying strategies embodied in the proposed rule are to: 1) eliminate the disease by depopulating deer from the affected area; 2) develop a barrier to the spread of CWD outside the affected area by reducing the deer herd in the areas surrounding the affected area; and 3) prevent the spread or establishment of new disease areas elsewhere in the state by implementing a ban on baiting and feeding deer statewide. An assessment of the proposed authorities and tools to accomplish these three strategies are the subject of this document.

The document begins with a Table of Contents to allow the reader to quickly find a subject of interest. It is followed by a 12-page Executive Summary of this complex issue which provides a summary of the highlights and findings of this document. Next, the document includes an overview of the proposed rule and a list of the persons who wrote and contributed to this document. The rest of the document provides the details and analyses done to determine the effects of the proposed rules and is divided into five major parts: Background, Wisconsin's CWD Management Plan, Depopulation, Herd Reduction, and Baiting and Feeding.

1. The Background chapter describes what is known scientifically about the disease and what is known about the transmission of the disease. This chapter contains information on what other states and provinces that currently have CWD in their wild deer or elk herds are doing to prevent its spread and to eliminate the disease. In addition, this chapter provides the history of CWD in Wisconsin and the actions that the DNR and other Wisconsin state agencies have taken in response to the disease so far.
2. The Wisconsin CWD Management Plan chapter presents the goals for CWD management in the state along with the strategies needed to accomplish these goals. These goals are to prevent the spread of and eliminate CWD from Wisconsin. The strategies are disease surveillance, human health protection, CWD research, communication, and disease control. Each of these five strategies is discussed briefly.
3. The Depopulation chapter assesses the effects of depopulating deer to eliminate CWD from an affected area. The chapter is divided into two parts. First, an assessment is made of the effects that may occur from the depopulation program and evaluates other alternatives to depopulation that might be used to eliminate the disease. The second half of the chapter addresses the effects of the tools being proposed to accomplish depopulation as well as evaluating other potential tools that might be used to accomplish depopulation.
4. The Herd Reduction chapter assesses the effects of herd reduction to contain and reduce the potential spread of the disease in areas surrounding a CWD affected area. This chapter is also divided into two parts. First, an assessment is made of the effects from the herd reduction program and evaluates other alternatives that might be used to prevent the spread of CWD

outside a known affected area. The second part of the chapter assesses the tools being proposed to accomplish herd reduction, as well as evaluating other tools that might be used for herd reduction.

5. The Baiting and Feeding section assesses the effects of a statewide ban on baiting and feeding deer and evaluates alternatives that might be used to prevent the spread of CWD elsewhere in the state.

The document ends with a list of all the scientific literature that was used in these analyses and 11 appendices that provide additional information on specific topics.

Table of Contents

<u>Executive Summary</u>	6
<u>Contributing Authors and Editors</u>	20
Other Contributors.....	22
<u>Rule Overview</u>	23
Rule Description.....	23
Rule Summary	23
Rule Authority	25
Estimated Cost and Funding Source	25
<u>Background</u>	26
Description of Disease	26
Agent	
Susceptibility	
Transmission and Routes of Infection	
Pathobiology	
Prevalence	
Factors Affecting Changes in Prevalence and Geographic Spread of CWD	
Deer Ecology as It Relates to CWD.....	31
Movements	
Reproduction and Mortality	
Wildlife Disease Control	32
Current CWD Management Plans	34
National CWD Management Plan	
Other State and Provincial Management Actions	
Federal Environmental Assessments.....	39
History of CWD in Wisconsin.....	39
Actions Taken by Wisconsin DNR to Control CWD.....	40
Legislation	
Emergency Rules	
Summer 2002 Deer Removal	
Actions Taken by Other Wisconsin State Agencies to Control CWD	41
DATCP Captive Cervid Regulations	
DHFS Human Health Monitoring	
University Involvement	
Tribal Issues and Involvement	43
<u>Wisconsin CWD Management Plan</u>	45
CWD Surveillance.....	45
Human Health Protection	46
CWD Research	46
Communications	46
Disease Control	47
<u>Depopulation</u>	48
Background	48
Depopulation Program	49
Proposed Action	
Effects	
Deer Population	
Disease Control	
Ecological Effects	
Carcass Disposal	
Socio-economic Effects	
Analysis of Alternatives to Depopulation	
No Action	
Deer Population Reduction and Research	
Live Trap, Test and Euthanize Diseased Animals	
Selective Removal of Individual Animals	

Depopulation Program Tools.....	61
Proposed Actions	
Extended Season	
Unlimited Tags	
Earn-a-Buck Regulation	
Either Sex Regulation	
State Park Seasons and Refuges	
Firearm Restrictions	
Landowner Permits	
Registration and Transportation	
Agency Shooters	
Aircraft Use	
Effects	
Deer Herd Reduction and Hunter Behavior	
Public Safety	
Trespass	
Recreational and Land Use Conflicts	
Enforcement	
DNR Revenue	
DNR Staffing and Expenditures	
Local Commerce	
Analysis of Alternative Depopulation Tools	
Traditional Seasons or Modest Season Extensions	
Require Licenses of All Hunters	
Unlimited Either Sex Tags	
Earn-a-Buck with Multiple Antlerless Deer	
Use Smaller or Larger Area to Define Eradication Zone	
Contraception as a Depopulation Method	
Depopulation Using Only Public Hunting	
Depopulation Using Only Landowner Shooting	
Landowner Incentives	
Depopulation Using Only Agency or Contract Shooting	
Depopulation Using Live Capture and Euthanasia	
Depopulation Using Toxicants	
<u>Herd Reduction</u>	72
Background	72
Herd Reduction Program	
Proposed Action	
Effects	
Deer Population	
Disease Control	
Ecological Effects	
Socio-economic Effects	
Analysis of Alternatives to Herd Reduction	
No Action	
Intensive Surveillance	
Herd Reduction Tools.....	78
Proposed Action	
Extended Season	
Unlimited Tags	
Earn-a-Buck Regulation	
Modification of Herd Reduction Zone Hunting Regulations	
State Park and Refuges Seasons	

Effects	
Deer Herd Reduction and Hunter Behavior	
Public Safety	
Trespass	
Recreational and Land Use Conflict	
Enforcement	
DNR Revenue	
DNR Staffing and Expenditures	
Local Commerce	
Analysis of Alternative Herd Reduction Techniques	
Traditional Seasons or Modest Season Extension	
Unlimited Either Sex Tags	
Earn-a-Buck with Multiple Antlerless Deer	
<u>Baiting and Feeding</u>	82
Background	82
Proposed Action	84
Effects	84
Deer Populations	
Disease Control	
Ecological Effects	
Socio-Economic Effects	
Analysis of Alternatives to a Ban on Baiting and Feeding	90
No Action	
Apply Ban to Smaller Geographic Area	
Baiting and Feeding License	
Quantity Restrictions	
Placement Restrictions	
<u>Literature Cited</u>	94
<u>Appendices</u>	105
Appendix A. Act 108 – Special CWD Legislation	105
Appendix B. Chronic Wasting Disease Rule Proposals (WM-05-03 and WM-09-03)	109
Appendix C. Carcass Disposal Options and Activities During 2002 CWD Management	127
Appendix D. CWD Management Questionnaire	132
Appendix E. CWD Rule Fiscal Estimate	134
Appendix F. Tribal Harvest Allocations and Seasons	140
Appendix G. Wisconsin Agricultural Deer Damage	142
Appendix H. Economic Impacts of Deer on Forests	157
Appendix I. Vehicle-Deer Collisions	162
Appendix J. Baiting and Feeding Background	165
Appendix K. Potential Impacts of a Baiting Prohibition on Wisconsin Hunters	173